Remarks

Claims 1-22 are pending.

§ 112 Rejections

Claim 21 stands rejected under 35 USC § 112, second paragraph, as purportedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

The Patent Office has repeated its rejection of claim 21 asserting that the claim improperly uses an open-ended term followed by a Markush group. Applicants respectfully submit that claim 21 as written particularly points out and distinctly claims the subject matter that the Applicants regard as the invention.

Specifically, claim 21 provides that "the substrate [of claim 12] comprises a material selected from the group consisting of polyesters, polyolefins, papers, foils, polyacrylates, polyurethanes, perfluoropolymers, polycarbonates, ethylene vinyl acetates, vinyl, fabrics, foam, polymer coated papers, retroreflective sheeting and combinations thereof." In claim 21, the open-ended term applies to the substrate, while the Markush group applies to the material. That is, the substrate must comprise at least one material selected from the Markush group, but the substrate may also comprise additional materials not present in the Markush group. For example, claim 21 would read upon a substrate comprising a polyester film (a material selected from the Markush group) in combination with (e.g., coated with or laminated to) a material not present in the Markush group.

In summary, Applicants submit that the rejection of claim 21 under 35 USC § 112, second paragraph, is unwarranted, and that the rejection should be withdrawn.

§ 103 Rejections

Claims 1-22 stand rejected under 35 USC § 103(a) as being unpatentable over Babu et al. (US 5,112,882) taken in view of either Davison (US 3,970,771) or Hansen et al. (US 5,993,900).

Independent claims 1 and 12 of the present invention recite a primer comprising (a) a maleated thermoplastic elastomer; (b) a non-halogenated polyolefin; and (c) a resin. The maleated thermoplastic elastomer comprises elastomer portions, and the elastomer portions have

a glass transition temperature. The resin raises the glass transition temperature of the elastomer portions of the maleated thermoplastic elastomer.

Babu is directed toward radiation curable poly(alpha-olefin) pressure-sensitive adhesive compositions. At col. 8, lines 50-56, Babu describes a primer consisting of a triblock copolymer of styrene-ethylene/butylene-styrene grafted with maleic anhydride (Kraton G-1901X) and a primer consisting of a combination of amorphous polypropylene and Kraton G-1901X. (Col. 8, lines 50-56.) As acknowledged by the Patent Office, Babu does not describe, teach or suggest a primer containing a resin in addition to a maleated thermoplastic elastomer and a non-halogenated polyolefin. (See, Paper No. 5, ¶ 3.)

The Patent Office asserts that Davison and Hansen describe the presence of a suitable resin in a closely related primer composition. (See, Paper No. 5, ¶ 3.) However, claims 1 and 12 require that the resin of the present invention raise the glass transition temperature of the elastomer portions of the maleated thermoplastic elastomer. (See, claims 1 and 12, emphasis added.)

According to the Patent Office, the limitation that the resin of the present invention raise the glass transition temperature of the elastomer portions of the maleated thermoplastic elastomer is an inherent property of Davison and Hansen. (See, Office Action dated October 22, 2003; ¶ 3.) Applicants respectfully traverse. As described in the Handbook of Pressure Sensitive Adhesive Technology, 2nd Ed. (D. Satas, Ed.; Van Nostrand Reinhold, New York, New York; 1989 (pages 185-89 are attached)) there is a clear distinction between midblock and endblock compatible resins. Midblock compatible resins increase the midblock glass transition temperature (Tg) without changing the endblock Tg, while endblock compatible resins increase the endblock Tg without changing the Tg of the midblock. (See, page 187 and Table 8-6.)

Hansen describes a primer composition comprising an elastomeric block copolymer and an end-block compatible resin. (See, col. 1, lines 62-67; col. 3, line 39-46; and col. 4, lines 29-31). Hansen further describes that suitable polymers have endblocks giving a resinous segment and a midblock giving an elastomeric segment (col. 2, lines 4-9). Thus, the resins of Hansen are compatible with the resinous segments of the elastomeric block copolymer, not the elastomeric midblock segments. Similarly, Davison teaches resins with a high degree of compatibility with the endblocks and largely incompatible with the elastomeric midblocks. (See, col. 2, lines 26-26; and lines 53-57.)

Thus, Hansen and Davison describe endblock (i.e., non-elastomeric segment) compatible resins, while the present invention requires a resin that raises the Tg of the elastomeric segment. Therefore, the Patent Office has not shown how the resins of Davison or Hansen would inherently raise the Tg of the elastomeric portions of the block copolymer of Babu.

For at least this reason, the combination of Babu with either Davison or Hansen fails to describe, teach or suggest all of the limitations of claims 1 and 12. Thus, the Patent Office has failed to meet its burden in establishing a prima facie case of obviousness, and the rejection of claims 1 and 12 is unwarranted and should be withdrawn.

Claims 2-11 each depend, directly or indirectly from claim 1 and add patentable features thereto. Claim 1 is patentable for at least the reasons stated above, thus claims 2-11 are likewise patentable. Similarly, claims 13-22 each depend, directly or indirectly from claim 12 and add patentable features thereto. Claim 12 is patentable for at least the reasons stated above, thus claims 13-22 are likewise patentable.

In summary, the rejection of claims 1-22 under 35 USC § 103(a) as purportedly being unpatentable over Babu et al. taken in view of either Davison or Hansen et al. has been overcome and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Allowance of all pending claims, at an early date is solicited.

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Respectfully submitted,
By: Colene H. Blank
Colene H. Blank, Reg. No.: 41,056
Telephone No.: (651) 737-2356

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833

CHB/TMS/spg